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Continuous Improvement in Nursing Education through Total Quality Management (TQM)

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Abstract

Total Quality Management (TQM) has generally been validated as a crucial revolution in the management field. Many academicians believe that the concept of TQM is applicable to academics and provides guiding principles towards improving education. Therefore, an increasing number of educational institutions such as schools, colleges and universities have started to embrace TQM philosophies to their curricula. Within the context of TQM, this paper would explore the concept of continuous improvement by using the Deming philosophy. Subsequently, this paper would elaborate on the application of TQM to bring about continuous improvement in the current education system.

Keywords*: Total Quality Management, TQM, Nursing Education, curricula, crucial revolution*

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Introduction

Quality is no longer a new or recent innovation. In reality, quality has been a fundamental constituent of culture throughout the world for several millennia. Nowadays, people are constantly seeking for quality products, quality services and even spending quality time with their spouses and family members.

Conventionally, quality has been described as 'innate excellence'; which emphasize on universal recognition (Maquad, 2003). However, in the recent decades, a new approach has been used to define the term 'quality'. According to Maquad (2003), the term 'quality' is defined as fulfilling and exceeding customers' expectations.

The same concept can be applied to the education perspective. In the education standpoint, customers comprise of faculty, staff, students, applicants, alumni, vendors, administrators, employers, donors, government and the society at large (Maquad, 2003). Bergquist (1995, cited in Maquad, 2003, pp.413) highlighted that the concept of 'quality' in the education perspective can be further defined as:

> …the extent to which an institution successfully directs adequate and appropriate resources (input) to the accomplishment of its mission-related outcomes (output) and that its programs make significant and positive difference in the lives of people associated with it (value-added) and that these programs are created, conducted, and modified (process) in line with the mission and values of the institution.

The Evolution of Total Quality Management (TQM)

Total Quality Management (TQM) is a management philosophy developed using a quality oriented foundation. This philosophy aims to provide organizations with a pathway for success through customer satisfaction (Hughes Maddox & Walsh, 2002).

The concept of TQM was first developed by Dr. W. Edward Deming after the World War II with the effort for improving production quality of goods and services (Hoy & Miskel, 2001). However, the concept of TQM was not taken seriously by the Americans until the Japanese, who adopted the concept to restore their postwar economics status emerged as one of the dominants of the world market in the 1980s (Yoshida, 1994).

Hence, in the early 1980s, an increasing number of organizations in the United States of America (USA) began to embrace the concept of TQM (Talha, 2004). Kanji, Malek and Tambi (1999) further affirmed that reputable firms such as Texas Instruments, Xerox, IBM and Motorola also starting to adopt TQM concepts and were able to overcome global threats and competition. Thus, by the 1990s, TQM had become an essential philosophy in the management of business as well as educational administration.

Definition of Total Quality Management (TQM)

TQM has been used interchangeably with numerous quality terms; such as 'quality improvement team', 'quality project team', 'employee involvement' and 'empowerment' (Dimitriades, 2000). Besides, Adlakha, Aggarwal and Mersha (2006), also avowed that during the 1980s, the west had started to refer TQM as continuous improvement.

On the other hand, Janine, Palmer and Scott (1994) defined the concept of TQM as 'emphasizes satisfying customer requirements, specifications, and expectations the first time and every time'. Conversely, Talha (2004, p. 15), further explained that the concept of TQM can also be referred as 'the broad set of management and control process designed to focus an entire organization and all of its employees on providing products or services that do the best possible job of satisfying the customer'.

Thus, the concept of TQM is depicted as customer-focused and be concerned with the concept of customer satisfaction (Hughes, Maddox & Walsh, 2002). Therefore, meeting customers' needs and expectations should be the purpose of product development and improvement (Jabnoun, 2001). Therefore, customers should be recognized as reasons behind the existences of an organization (Jabnoun, 2001). Besides, Freeman, Gilbert & Stoner (1995), further explained that all efforts should be concentrate in satisfying customers real needs.

In this context, TQM can be described as the development of an organizational culture which focused on the constant fulfillment of client satisfaction through combination of tools, techniques and training (Sashkin & Kiser, 1993, cited in Hughes, Maddox & Walsh, 2002). Subsequently, the concept of TQM is characterized as a well-managed, methodical process for creating system-wide participation in planning and applying continuous improvements in quality (Janine, Palmer & Scott, 1994). Thus, in order to ensure consistently producing high quality products and services, continuous improvement of organizational process is crucial.

The subsequent chapter of this paper would explain the principle of continuous improvement within the context of TQM by using Deming philosophy.

The Concept of Continuous Improvement

The concept of continuous improvement is originated from the Japanese term 'kaizen'; meaning continual incremental accumulation of improvement by all organizational matters including people, equipment, supplies, materials and procedures (Temponi, 2005).

According to Adlakha, Aggarwal and Mersha (2006), continuous improvement is an organized management strategy that seeks to excel ongoing improvements in all features of an organization's functions and output in order to ensure the requirement and expectations of the clients are fulfilled effectively and efficiently.

In this context, therefore, continuous improvement can be defined as 'relentless quest to satisfy all customers through constant refinement of organizational processes and financial, mechanical and human resources' (Dionne & Sosik, 1997, p.450). Thus, Temponi (2005) further explained that in continuous improvement approach, every step of the process of an organization has room for improvement.

Hence, the success of continuous improvement initiatives is related to many factors such as leadership as well as structured and shared organizational values (Jabnoun, 2001). Dionne and Sosik (2005), stated that charismatic leaders would increase the subordinates' levels of moral development and self-concept. Thus, enable subordinates to comprehend organization's mission and their organizational processes and roles (Conger, 1989, cited in Dionne & Sosik, 2005).

Consequently, continuous improvement would reduce waste and rework, while on the other hand, increased efficiency, less error and delay, optimize resources usage and achievement of objectives (Adlakha, Aggarwal & Mersha, 2006).

The following chapter would discuss the significance of continuous improvement and further elaborate on to the application of TQM in academics and bringing about continuous improvement in dealing with the challenges in the current education system.

Applying Total Quality Management (TQM) to Achieve Continuous Improvement in Education System

TQM approach can develop a process that will improve the educational system and also at the same time reduce variation among students' achievement.

Therefore, in our current setting, student must be viewed as customers. Thus, students' opinions, needs, objectives and suggestions must be acknowledged by the educational institutions in order to identify students' needs and subsequently, satisfy students' satisfaction. Hence, TQM would then reinforce the assumption that every student wants to do a good job and if given opportunity, they are capable to meet the course expectations. Such assumption would urge everyone in the institution to participate in helping the students to excel.

Therefore, in this context, continuous improvement is one of the most important values of quality management (Temponi, 2005). Weller and Weller (1997), further explained that continuous improvement emphasizes that the people closest to the situation or problem would know the problems the best. Thus, they would be able to work to improve the situation once these people have ownership in the proposed changes (Weller & Weller, 1997).

In this context, therefore, students should be empowered to engage in continuous improvement for the betterment of their class. Simultaneously, students also should engage themselves in a continuous improvement process of their own.

System for Reducing Variation among Students

The system introduced by the Deming's fourteen points is one of the models that would be able to improve the problem in the educational system. Thus, in this context, according to Castellano and Roehm (1995), understanding of Deming's 'system of profound knowledge' is vital in order to bring about changes to the prevailing style of management and subsequently lead to long-term survival transformation.

Hence, two very important elements of profound knowledge are understanding a system and understanding variation (Castellano & Roehm, 1995).

Understanding a System – Profound Knowledge

The first element in Deming's system of profound knowledge understands a system. According to Castellano and Roehm (1995), 'a system' is referring to a network of interrelated activities that are performed to achieve some goals of the entire system and not the individual units.

In this context, achieving 'one hundred percent pass in the national examinations' should be a common goal for all the students. All students should be given equal rights to sit for their national examinations. Therefore, educational institutions should not defer students from sitting the national examination just because they do not achieve the required standards. Instead, the educational institutions should come out with ways to assist these below average students in achieving the required standard.

Therefore, interdependencies must be created by a system where everyone in the organization must work toward this common goal. Hence, according to Castellano and Roehm (1995), the higher degree of interdependency, the higher degree need of cooperation, communication and leadership is needed. Thus, competition shall not exist in the nature of a system based on cooperation.

In this context, students should be encouraged to work together as a group on a regular basis such as setting up study group, project assignments and also helping one another. Hence, according to Janine, Palmer and Scott (1994), students need to embrace active participation in their learning process. On the other hand, the role of the teachers should not be limited to deliver information, but also need to facilitate students to participate in active learning environment (Janine, Palmer & Scott, 1994).

As trust and cooperation develop within the students, they would learn to evaluate each other's work and also discuss the strength and weaknesses of their arguments and answers (Maquad, 2003). Besides, Maquad (2003), also further explained that students would also learn to evaluate their own thinking, increasing their knowledge. Subsequently, the process creates the sense of belonging, bonding or togetherness within their group and thus, they will help each other in the process to improve the overall achievement of their group (Yoshida, 1994). Consequently, no students would be repeating a semester or discontinuing studies due to poor levels of academic achievement.

Understanding Variation – Profound Knowledge

The second element of profound knowledge is an understanding of variation. According to Castellano and Roehm (1995), variation in a process is common and thus, organization should strive to reduce the variation. However, in this context, the educational institution has widen the variation by concentrating efforts onto the above average students and neglected the below average students.

Generally, there are two sources of variation in the output from a process. The first is called 'common cause variation'. According to Castellano and Roehm (1995), this type of variation is inherent in the system. For example, students' poor level of performance in certain subjects is due to the common cause of tutors' low teaching methodology skills, low mastery of updated knowledge and skills, too much emphasis on examinations and low tutor morale and lack of motivation.

Therefore, in this context, students should not be held responsible for this type of variation. Instead, students should be motivated to help each other. Yoshida (1994) further elaborated that the spirit of teamwork would eventually discourage competition and subsequently, reduces variation among students performance.

Besides, the management of the educational institution should also reflect and simultaneously improve on the common causes of variation such as continuous improvement in teaching methods, update skills and master new technologies to keep their competency. Hence, Yoshida (1994) the application of 'mentor-teachers system' which was introduced in United States of America has proven to be useful in collaborating continuous improvement among the new tutors and the experienced tutors. This collaboration strategy encourages sharing knowledge and skills among the tutors. Consequently, students would benefit from the outcome of this strategy.

Alternatively, the second type of variation is called special cause variation. According to Castellano and Roehm (1995), this type of variation was originated from the external process. For example, below average students who wrote and extremely good assignment could be due to plagiarism or above average students failed her examination could be related to her sudden sickness during examination.

Hence, Castellano and Roehm (1995) further explained that understanding the difference between common cause variation and special cause variation in a system is crucial in leading the success of an organization through the continuous improvement strategies.

Conclusion

As a conclusion, the ultimate goal of total quality or quality education would be the same which is customer satisfaction (student satisfaction). Therefore, applying TQM concept is a continuous improvement strategy which will not only improve the students' performance but also preparing students to understand, cope with and subsequently change the environment in which they live and work.

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